

unless one is practiced enough to know how to administer a medicament with a hypodermic syringe. A physician would use morphine sulphate gr. 1-6 to control convulsions and pain, he would give hypodermics of digitalis and alcohol and camphor to stimulate the heart. He would inject under the skin of the abdomen or the thigh about 500 cc. (1 pint) of a normal salt solution to replace the water drained from the body by the vomiting and purging and lastly he would use one or two hypodermics of atropine sulphate gr. 1-100. This remedy, atropine sulphate, is said to be a specific antidote to every poison except the fatal poison amanitin (Ford). The atropine sulphate is most useful for the symptoms which occur in the late stages of the poisoning. It checks secretion from the skin and gastro-intestinal tract. It therefore stops the exhaustive diarrhoea and it stimulates the brain and keeps the respiration and the heart going until the patient can neutralize or eliminate the poison.

The researches of Ford would indicate that atropine sulphate is a true specific against all mushroom poisons except amanitin (Ford). Every amateur who expects to collect and eat his mushrooms should learn from his physician how to administer hypodermic medication and should carry along with his botanical books and his bottle of vinegar, a hypodermic syringe and a few precious tablets of atropine sulphate.

THE GENUS ANAMOMIS IN FLORIDA

BY JOHN K. SMALL.

In the spring of 1904, Mr. P. Wilson and the writer collected specimens of twigs of a species of *Anamomis* from an old stump at a lately abandoned surveyor's camp on Long Key in the Everglades. In the winter of 1909, Mr. J. J. Carter and the writer collected similar twigs from stumps in the hammock on the eastern end of Long Key. About the same time we found some rather poor flowering specimens of the same kind of tree in the hammock of the small key which lies west of the southern part of Royal Palm Hammock.

These specimens were referred to the only species of *Anamomis* known to grow in the United States, the endemic *Anamomis dicrana*. The leaves on the twigs collected from sprouting stumps were evidently not typical of the normally developed tree, while those on our only flowering specimens were only partly developed. Last winter, however, I received a branch with fully and normally developed leaves, collected by Mr. Charles T. Simpson in the Arch Creek Hammock. This specimen revived my interest in the specimens we had collected in previous years; but it was not until April 1917 that the status of the plant was finally established. One morning in passing Arch Creek while going from Ft. Lauderdale to Miami, Mr. Simpson and I visited the trees Mr. Simpson had discovered in the winter, and fortunately we found one tree in full flower. The mature leaves and the flowers proved the tree to be different from the previously known Florida species of *Anamomis*, and also different from any species known from the West Indies. The tree should bear the name of the discoverer of the best specimens, and it may be named and described as follows:

Anamomis Simpsonii Small sp. nov. A tree 15 m. tall or less with a buttressed trunk when well grown, a smooth bark, and finely appressed-pubescent twigs: leaves numerous; blades narrowly obovate, elliptic-obovate, or nearly elliptic, 2.5–6.5 cm. long, acutish, obtuse, or notched at the apex, dark green and shining above, paler and dull beneath, coriaceous, finely glandular-punctate, entire, with rather distant primary straight lateral veins and coarse rather faint (except when dry) reticulations between them, with the branches forming marginal loops, rather slender-petioled: cymes lateral, 3–15-flowered, slender-peduncled, the peduncles about as long as the subtending leaves, sometimes longer, sometimes shorter, minutely appressed-pubescent, each bearing a pair of small leaf-like bracts at the apex: flowers fragrant, sessile: hypanthium short-obconic, densely silky-strigillose with white hairs: sepals 4, green, paired, two of them orbicular-ovate, two orbicular-reniform, 2–2.5 mm. long, obtuse, punctate, the narrower ones merely ciliolate, not scarious-margined, the wider ones with erose-ciliolate margins: petals white, concave, 4–5 mm. long, obovate to suborbicular, sparingly punctate, erose-ciliate: stamens mostly 60–70; filaments capillary, 5–6 mm. long; anthers globose-didymous, fully 0.5 mm.



ANANOMIS SIMPSONII Small.

EXPLANATION OF FIGURE. *A*, flowering branch, $\frac{2}{3}$ natural size; *b*, a bud, enlarged; *c*, a flower with petals and stamens removed, enlarged; *d*, two adjacent sepals; enlarged; *e*, two adjacent petals, enlarged; *f*, a stamen, enlarged; *g*, a fruit, enlarged; *h*, a seed, enlarged.

in diameter: style filiform, slightly thickened under the stigma: berry ellipsoid, often broadly so, mostly 8-10 mm. long, red: seeds usually solitary, reniform.

On limestone, hammock on the southern side of Arch Creek north and south of the natural bridge, Florida. Types, for flowers, *Small & Simpson*, May 12, 1917, for fruit, *Simpson*, August 8, 1917, both in herb. New York Botanical Garden.

Anamomis Simpsonii differs from *A. dicrana* in the larger flowers, the several-flowered cymes, and the very numerous stamens. The following key will serve to differentiate the two species:

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| Corolla less than 1 cm. wide; petals 2.5-3.5 mm. long; stamens mostly 30-40; cymes few-flowered. | 1. <i>A. dicrana</i> . |
| Corolla over 1 cm. wide; petals 4.5-6 mm. long; stamens mostly 60-70; cymes several-flowered. | 2. <i>A. Simpsonii</i> . |

The known geographical distribution is: Arch Creek Hammock, small key west of Royal Palm Hammock, and hammocks on the eastern end of Long Key, Everglades. It is to be expected in other hammocks of the Everglade Keys.

The other closely related species, *Anamomis dicrana*, grows in an entirely different part of Florida. It occurs along the eastern coast from about Mosquito Inlet to Cape Canaveral, and on the western coast from the Caloosahatchee River to Cape Romano.

Rather fragmentary specimens of an *Anamomis* were collected on Key West many years ago. These have been referred to *A. dicrana*, but that disposition of them now appears doubtfully correct. The rediscovery of *Anamomis* on Key West is extremely desirable for the proper disposition of that plant. If it has been exterminated on Key West, it may still come to light on some of the neighboring keys.

Two additional species, *Anamomis longipes* and *A. bahamensis*, are known from the limestone pinelands of the Everglade Keys and of the lower Florida Keys. Thus we can now definitely record four species of *Anamomis* from Florida, two of which also grow in the West Indies.